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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/858,116	05/19/97	MIZUSUGI T	0073,520SF2

IM31/0426

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EXAMINER  
GRIFFIN, S

ART UNIT 1731	PAPER NUMBER
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DATE MAILED: 04/26/99

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UNITED STATES DEPARTMENT OF COMMERCE  
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 36

Application Number: 08/858,116  
Filing Date: 05/19/97  
Appellant(s): Tetsuya Mizusugi et al.

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Curtis B. Hamre  
For Appellant

**APR 26 1999**

**EXAMINER'S ANSWER**

This is in response to appellant's brief on appeal filed 2-25-99.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

Art Unit: 1731

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

No amendment after final has been filed.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

The rejection of claims 5-8 and 10 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

4,229,200	SEYMOUR	10-1980
4,609,391	MCMASTER	9-1986

Art Unit: 1731

4,859,225

KUSTER ET AL.

8-1989

**(10) *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

Claims 10 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seymour 4,229,200 in view of McMaster 4,609,391. This rejection is set forth in prior Office action, Paper No. 31.

Claims 10 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seymour 4,229,200 in view of Kuster et al. 4,859,225. This rejection is set forth in prior Office action, Paper No. 31.

**(11) *Response to Argument***

In response to Appellant's remarks (see page 5 of Appellant's Brief) that:

"Claim 10 defines a method which includes shaping using a first vacuum and then shaping using a second vacuum so that the shaping is successive. After the first and second vacuums are developed and the first and second areas of the sheet of glass are shaped to be complementary, the sheet of glass is released from the shaping surface areas of the suction mold onto a quenching ring to moved to quenching. The references teach different processes and do not suggest the method of claim 10."

it is considered that Seymour provides for shaping a sheet of glass by first using a first vacuum which is provided by vacuum platen 40 which conforms a portion of the glass sheet against its vacuum surface thus shaping it to the vacuum surface thereof and then utilizing a second vacuum provided by the shaping blocks 120, 130 which shape a second area of the glass sheet by vacuum forming the second area of the glass sheet against the surface of the shaping blocks, the releasing of a shaped glass sheet formed by vacuum molding from a vacuum forming mold

Art Unit: 1731

is then clearly suggested and provided by the teachings of either one of McMaster or Kuster et al. which both shape glass sheets by vacuum forming and then release the glass sheet which has been shaped onto a quenching ring which moves the shaped glass to a tempering station for quenching of the sheet so as to temper it, it is further noted that one may consider the outline shaping mold/ring 128, 142 of Seymour as functioning as a quenching ring because Seymour discloses that the glass sheet is released from the vacuum forming molds and dropped onto the outline shaping mold/ring which then immediately transfer the sheet out of the bending station and into a tempering station (col. 8, lines 23-30).

In response to Appellant's remarks (page 5 of Appellant's Brief) that:

“Seymour very clearly requires a flat and rigid bottom plate for the vacuum platen. Seymour indicates that the flat vacuum platen is an important factor to the success of the invention.”

it is considered that Appellant's appear to be arguing that the instant invention requires something other than a flat and rigid bottom plate as in Seymour, but the instant claims herein fail to provide any limitations which require anything other than the flat and rigid bottom plate as in Seymour, the flat and rigid bottom plate of Seymour clearly shapes the glass sheet thereagainst when a vacuum is applied therethrough thus the flat and rigid bottom plate of Seymour meets the limitations of the first shaping surface area and the attraction of a first area of the glass sheet thereagainst as in the instant claims.

In response to Appellant's remarks (page 5 of Appellant's Brief) that:

“The process of Seymour uses the vacuum step to hold the sheet of glass momentarily while the shaping mold is properly placed and then releases the vacuum quickly so that the glass can fall into the shaping mold and be shaped by the impact. The process of Seymour is incredibly and clearly and distinctly different from the method of claim 10.”

Art Unit: 1731

it is considered that Appellant's are arguing that the shaping steps of the instant invention are somehow different from the shaping of the glass sheet of Seymour even though they shape a glass sheet in the same way, it is noted that the glass sheet of Seymour is shaped by applying a first vacuum to the glass sheet to shape a first area of the sheet and then applying a second vacuum to a second area of the sheet which clearly provides a shape to the glass sheet thus meeting the limitations of the instant invention, the fact that Seymour includes further steps to provide for additional shaping of the glass sheet therein is irrelevant in view of the fact that the vacuum applying steps of Seymour shape the glass sheet as in the instant invention.

In response to Appellant's remarks (page 5 of Appellant's Brief) that:

"The vacuums are used to shape the sheet of glass in the method of claim 10 and then the sheet of glass is released from the shaping surface areas directly to the quenching ring. Seymour does not suggest such a method. Furthermore, the methods of McMaster and Kuster '225 are just as distinctly different from the method of claim 10 as is Seymour. McMaster and Kuster '225 simply show some form of ring structure for moving the glass sheet to a tempering station, such as quenching."

it is considered that appellant's are arguing against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references as is the case herein. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The combination of Seymour with either one of McMaster or Kuster et al. suggests the instant invention as Seymour discloses the vacuum shaping steps as in instant claim 10 and McMaster and Kuster et al. disclose that it is well known to receive a glass sheet from a vacuum shaping mold onto a quenching ring and to transport the sheet to a

Art Unit: 1731

quenching/tempering station for quenching and tempering of the glass sheet, therefore, when the teachings of the references are combined they suggest the invention of claim 10.

In response to Appellant's remarks (page 5 of Appellant's Brief) that:

“The advantages due to the difference in method between that defined in claim 10 and the reference is non trivial. The method of claim 10 eliminates the possibility of air bubbles or of excessively stretching, either of which can occur when a ring passes or forces the edges of a glass sheet toward a shaping structure and a vacuum is drawn. Furthermore the possibility of breakage due to the dropping of a glass sheet as in Seymour is clearly not present in the method of claim 10. The method defined by claim 10 is, consequently, not very different, but leads to non trivial advantages.”

it is considered that the claims fail to recite any limitations which distinguish them from the combination of references in the applied prior art rejections and the claims fail to provide any limitations which recite the advantages advanced by Appellant's and particularly the elimination of the possibility of air bubbles or of excessive stretching of the glass sheet, regarding the breakage statement it is considered that Seymour has not been applied in the combination as providing the dropping of the glass sheet thus it is considered that this step is not required of the applied combination.

Application/Control Number: 08/858,116

Page 7

Art Unit: 1731

For the above reasons, it is believed that the rejections should be sustained.

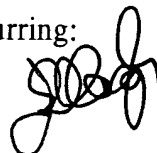
Respectfully submitted,



4-22-99

**STEVEN P. GRIFFIN**  
**PRIMARY EXAMINER**  
Art Unit 1731

Concurring:



SPG  
April 22, 1999

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